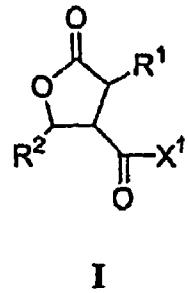


**IN THE CLAIMS:**

1. (Withdrawn) Compounds of formula I :



wherein

$R^1$  = H, or  $C_1$ - $C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl,  $=CHR^3$ ,  $-C(O)OR^3$ ,  $-C(O)R^3$ ,  $-CH_2C(O)OR^3$ ,  $-CH_2C(O)NHR^3$ , where  $R^3$  is H or  $C_1$ - $C_{10}$  alkyl, cycloalkyl, or alkenyl;

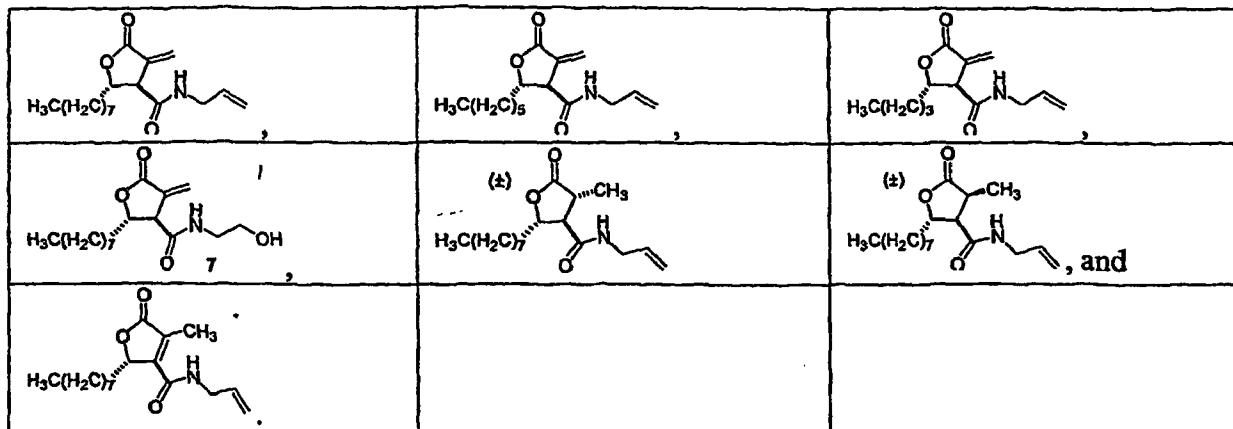
$R^2$  =  $C_1$ - $C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl;

$X^1$  =  $NHR^4$ , where  $R^4$  is H,  $C_1$ - $C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, the  $R^4$  group optionally containing a carbonyl group, a carboxyl group, a carboxamide group, an alcohol group, or an ether group, the  $R^4$  group further optionally containing one or more halogen atoms.

2. (Withdrawn) The compounds of claim 1, wherein  $R^1$  is H, or  $C_1$ - $C_{10}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, or  $=CH_2$ .

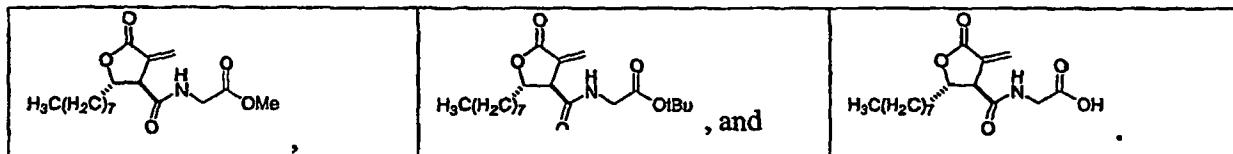
3. (Withdrawn) The compounds of claim 2, wherein  $R^1$  is  $-CH_3$  or  $=CH_2$ .

4. (Withdrawn) The compounds of claim 3, wherein the compound is selected from the group consisting of:

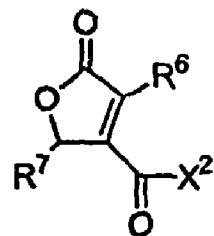


5. (Withdrawn) The compounds of claim 1, wherein  $R^4$  is  $-\text{CH}_2\text{C}(\text{O})\text{OR}^5$  or  $-\text{CH}_2\text{C}(\text{O})\text{NHR}^5$ , where  $R^5$  is H, C<sub>1</sub>-C<sub>10</sub> alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl.

6. (Withdrawn) The compounds of claim 1, wherein the compound is selected from the group consisting of:



7. (Withdrawn) Compounds of formula II:



II

wherein

$R^6$  = H, or  $C_1-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl,  $-C(O)OR^8$ ,  $-C(O)R^8$ ,  $-CH_2C(O)OR^8$ ,  $-CH_2C(O)NHR^8$ , where  $R^8$  is H or  $C_1-C_{10}$  alkyl, cycloalkyl, or alkenyl;

$R^7$  =  $C_1-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl;

$X^2$  =  $NHR^9$ , where  $R^9$  is H,  $C_1-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, the  $R^9$  group optionally containing a carbonyl group, a carboxyl group, a carboxyamide group, an alcohol group, or an ether group, the  $R^9$  group further optionally containing one or more halogen atoms;

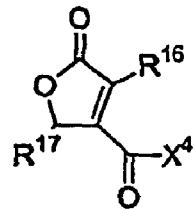
with the proviso that when  $R^6$  is  $-CH_3$ , and  $R^7$  is  $n-C_{13}H_{27}$ ,  $X^2$  is not  $-NHC_2H_5$ .

8. (Withdrawn) The compounds of claim 7, wherein  $R^6$  is  $C_1-C_{10}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl.

9. (Withdrawn) The compounds of claim 8, wherein  $R^6$  is  $-CH_3$ .

10. (Withdrawn) The compounds of claim 7, wherein  $R^9$  is  $-CH_2C(O)OR^{10}$  or  $-CH_2C(O)NHR^{10}$ , where  $R^{10}$  is H,  $C_1-C_{10}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl.

11. (Withdrawn) Compounds of formula IV:



**IV**

wherein

$R^{16}$  = H, or  $C_1-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl,  $-C(O)OR^{18}$ ,  $-C(O)R^{18}$ ,  $-CH_2C(O)OR^{18}$ ,  $-CH_2C(O)NHR^{18}$ , where  $R^{18}$  is H or  $C_1-C_{10}$  alkyl, cycloalkyl, or alkenyl;

$R^{17}$  =  $C_1-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl;

$X^4$  =  $OR^{19}$ , where  $R^{19}$  is  $C_1-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, the  $R^{19}$  group optionally containing a carbonyl group, a carboxyl group, a carboxamide group, an alcohol group, or an ether group, the  $R^{19}$  group further optionally containing one or more halogen atoms;

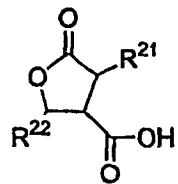
with the proviso that when  $R^{16}$  is  $-CH_3$  and  $R^{19}$  is  $-CH_3$ , then  $R^{17}$  is not substituted or unsubstituted phenyl,  $-nC_3H_7$ ,  $-nC_5H_{11}$ ,  $-nC_{13}H_{27}$ , and with the further proviso that when  $R^{16}$  is H and  $R^{19}$  is  $-CH_3$ , then  $R^{17}$  is not substituted or unsubstituted phenyl or  $-CH_3$ , and when  $R^{16}$  is H and  $R^{19}$  is  $-CH_2CH_3$ , then  $R^{17}$  is not  $-iC_3H_7$ , or substituted or unsubstituted phenyl.

12. (Withdrawn) The compounds of claim 11, wherein  $R^{16}$  is  $C_1-C_{10}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl.

13. (Withdrawn) The compounds of claim 12, wherein  $R^{16}$  is  $-CH_3$ .

14. (Withdrawn) The compounds of claim 11, wherein  $R^{19}$  is  $-CH_2C(O)OR^{20}$  or  $-CH_2C(O)NHR^{20}$ , where  $R^{20}$  is  $C_1-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl.

15. (Currently Amended) Compounds of formula V:



**V**

wherein

$R^{21} = C_2-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl,  $=CHR^{23}$ ,  $-C(O)OR^{23}$   
 $-C(O)R^{23}$ ,  $-CH_2C(O)OR^{23}$ ,  $-CH_2C(O)NHR^{23}$ , where  $R^{23}$  is H or  $C_1-C_{10}$  alkyl, cycloalkyl, or  
 alkenyl, except when  $R^{21}$  is  $=CHR^{23}$ ,  $R^{23}$  is not H;

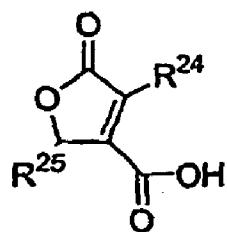
$R^{22} = C_2-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl;

with the proviso that when  $R^{21}$  is  $-COOH$ , then  $R^{22}$  is not  $-CH_3$ ,  $-nC_5H_{11}$ , or  $C_{13}H_{27}$  and  
 with the further proviso that when  $R^{21}$  is  $-CH_2COOH$ , then  $R^{22}$  is not  $-CH_2CH_3$ , or  $-iC_5H_{11}$ .

16. (Currently Amended) The compounds of claim 1 5, wherein  $R^{21}$  is  $C_2-C_{20}$  alkyl,  
 cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl.

17. (Cancelled)

18. (Withdrawn) Compounds of formula VI:



**VI**

wherein:

$R^{24} = C_2-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl,  $-C(O)OR^{26}$ ,

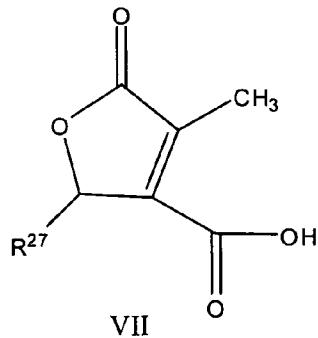
$-C(O)R^{26}$ ,  $-CH_2C(O)OR^{26}$ ,  $-CH_2C(O)NHR^{26}$ , where  $R^{26}$  is H or  $C_1-C_{10}$  alkyl, cycloalkyl, or alkenyl;

$R^{25} = C_1-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl;

with the proviso that when  $R^{24}$  is  $-COOH$ , then  $R^{25}$  is not  $-CH_3$ ,  $-nC_5H_{11}$ , or  $C_{13}H_{27}$ , and with the further proviso that when  $R^{24}$  is  $-CH_2COOH$ , then  $R^{25}$  is not  $-CH_3$ ,  $-CH_2CH_3$ , or  $-iC_5H_{11}$ .

19. (Withdrawn) The compounds of claim 18, wherein  $R^{21}$  is  $C_2-C_{10}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl.

20. (Currently Amended) Compounds of formula VII:

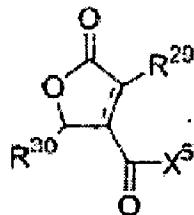


wherein

$R^{27} = C_{12}$  alkyl,  $C_{14}$  alkyl,  $C_{16}-C_{20}$  alkyl.

21 – 22. (Cancelled)

23. (Withdrawn) A pharmaceutical composition comprising a pharmaceutical diluent and a compound of formula IX:



**IX**

$R^{29}$  = H, or  $C_1-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl,  $=CHR^{31}$ ,  $-C(O)OR^{31}$ ,  $-C(O)R^{31}$ ,  $-CH_2C(O)OR^{31}$ ,  $-CH_2C(O)NHR^{31}$ , where  $R^{31}$  is H or  $C_1-C_{10}$  alkyl, cycloalkyl, or alkenyl;

$R^{30}$  =  $C_1-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl;

$X^5$  =  $-OR^{32}$ , or  $-NHR^{32}$ , where  $R^{32}$  is H,  $C_1-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, the  $R^{32}$  group optionally containing a carbonyl group, a carboxyl group, a carboxyamide group, an alcohol group, or an ether group, the  $R^{32}$  group further optionally containing one or more halogen atoms;

with the proviso that when  $R^{29}$  is  $=CH_2$ , then  $X^5$  is not OH.

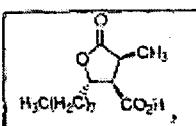
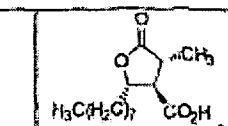
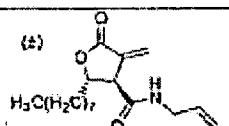
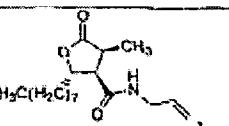
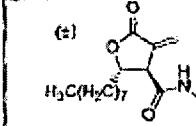
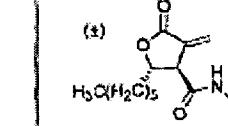
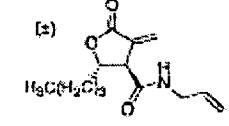
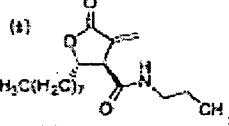
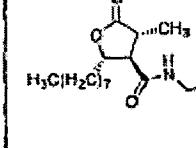
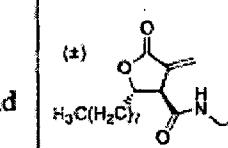
24. (Withdrawn) The pharmaceutical compositions of claim 23, wherein  $R^{29}$  is  $C_1-C_{10}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, or  $=CH_2$ .

25. (Withdrawn) The pharmaceutical compositions of claim 24, wherein  $R^{29}$  is  $-CH_3$  or  $=CH_2$ .

26. (Withdrawn) The pharmaceutical compositions of claim 23, wherein R<sup>32</sup> is -CH<sub>2</sub>C(O)OR<sup>33</sup> or -CH<sub>2</sub>C(O)NHR<sup>33</sup>, where R<sup>33</sup> is C<sub>1</sub>-C<sub>10</sub> alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl.

27. (Withdrawn) The pharmaceutical compositions of claim 23, where R<sup>29</sup> is -C<sub>6</sub>H<sub>13</sub> or -C<sub>8</sub>H<sub>17</sub>.

28. (Withdrawn) The pharmaceutical compositions of claim 23, wherein the compound is selected from the group consisting of:

29. (Withdrawn) A pharmaceutical composition comprising a pharmaceutical diluent and a compound according to claim 1.

30. (Withdrawn) A pharmaceutical composition comprising a pharmaceutical diluent and a compound according to claim 7.

31. (Withdrawn) A pharmaceutical composition comprising a pharmaceutical diluent and a compound according to claim 11.

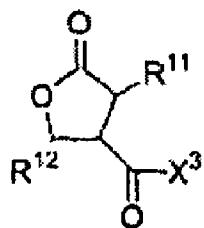
32. (Original) A pharmaceutical composition comprising a pharmaceutical diluent and a compound according to claim 15.

33. (Withdrawn) A pharmaceutical composition comprising a pharmaceutical diluent and a compound according to claim 18.

34. (Original) A pharmaceutical composition comprising a pharmaceutical diluent and a compound according to claim 20.

35. (Withdrawn) A pharmaceutical composition comprising a pharmaceutical diluent and a compound according to claim 22.

36. (Withdrawn) A pharmaceutical composition comprising a pharmaceutical diluent and a compound according to Formula III:



wherein

$R^{11}$  = H, or  $C_1-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl,  $=CHR^{13}$ ,  $-C(O)OR^{13}$ ,  $-C(O)R^{13}$ ,  $-CH_2C(O)OR^{13}$ ,  $-CH_2C(O)NHR^{13}$ , where  $R^{13}$  is H or  $C_1-C_{10}$  alkyl, cycloalkyl, or alkenyl;

$R^{12}$  =  $C_1-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl ;

$X^3 = OR^{14}$ , where  $R^{14}$  is  $C_1-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, the  $R^{14}$  group optionally containing a carbonyl group, a carboxyl group, a carboxamide group, an alcohol group, or an ether group, the  $R^{14}$  group further optionally containing one or more halogen atoms.

37. (Withdrawn) The pharmaceutical formulation of claim 36, wherein  $R^{11}$  is  $C_1-C_{10}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, or  $=CH_2$ .

38. (Withdrawn) The pharmaceutical formulation of claim 37, wherein  $R^{11}$  is  $-CH_3$  or  $=CH_2$ .

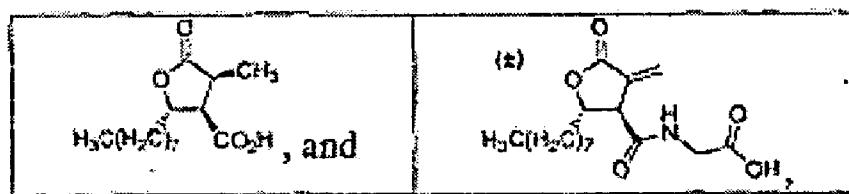
39. (Withdrawn) The pharmaceutical formulation of claim 36, wherein  $R^{14}$  is  $-CH_2C(O)OR^{15}$  or  $CH_2C(O)NHR^{15}$ , where  $R^{15}$  is  $C_1-C_{10}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl.

40. (Withdrawn) A method of inducing weight loss in an animal or human subject comprising administering an effective amount of a pharmaceutical composition according to claim 23 to said subject.

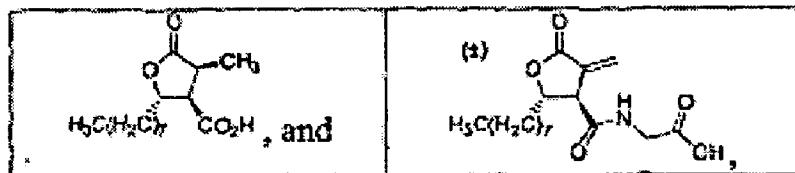
41. (Withdrawn) The method of claim 40, wherein the subject is a human.

42. (Withdrawn) The method of claim 40, wherein the subject is an animal.

43. (Withdrawn) The method of claim 41, wherein the pharmaceutical composition comprises a compound selected from the group consisting of



44. (Withdrawn) The method of claim 42, wherein the pharmaceutical composition comprises a compound selected from the group consisting of:

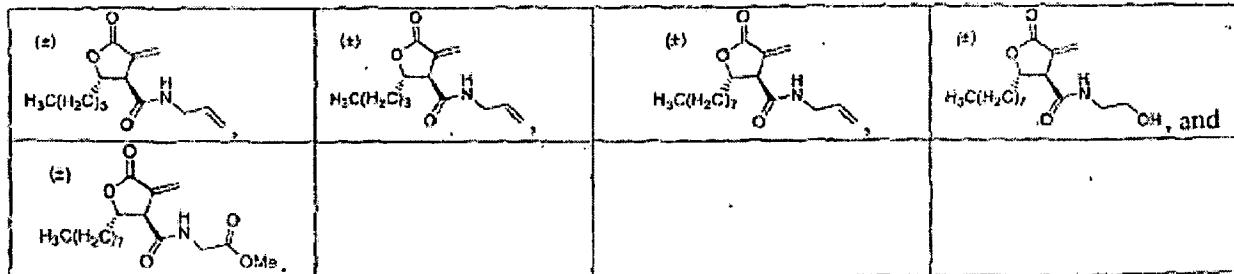


45. (Withdrawn) A method of inhibiting growth of cancer cells in an animal or human subject, comprising administering an effective amount of a pharmaceutical composition according to claim 23 to said subject.

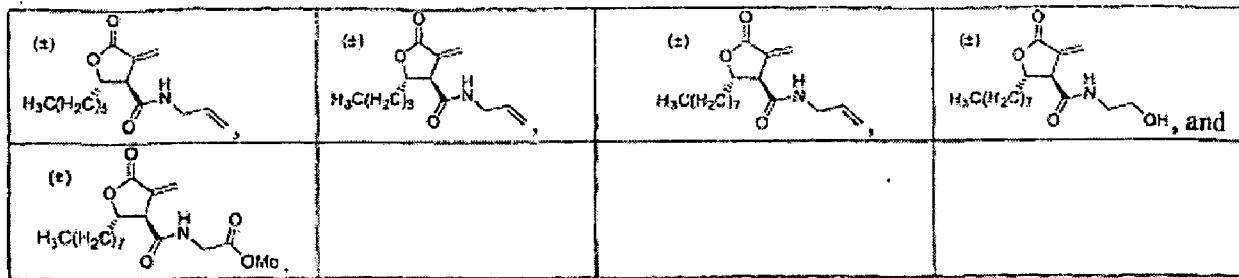
46. (Withdrawn) The method of claim 45, wherein the subject is a human.

47. (Withdrawn) The method of claim 45, wherein the subject is an animal.

48. (Withdrawn) The method of claim 46, wherein the pharmaceutical composition comprises a compound selected from the group consisting of



49. (Withdrawn) The method of claim 47, wherein the pharmaceutical composition comprises a compound selected from the group consisting of:

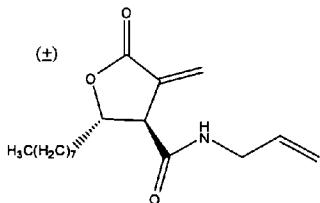


50. (Withdrawn) A method of stimulating the activity of CPT-1 in an animal or human subject comprising administering an effective amount of a pharmaceutical composition according to claim 23 to said subject.

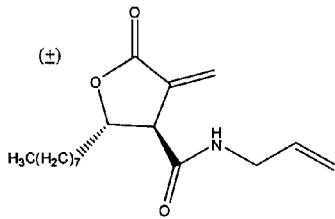
51. (Withdrawn) The method of claim 50, wherein the subject is a human.

52. (Withdrawn) The method of claim 50, wherein the subject is an animal.

53. (Withdrawn) The method of claim 51, wherein the compound is:



54. (Withdrawn) The method of claim 52, wherein the compound is:



55. (Withdrawn) A method of inhibiting the activity of neuropeptide-Y in an animal or human subject comprising administering an effective amount of a pharmaceutical composition according to claim 23 to said subject.

56. (Withdrawn) The method of claim 55, wherein the subject is a human.

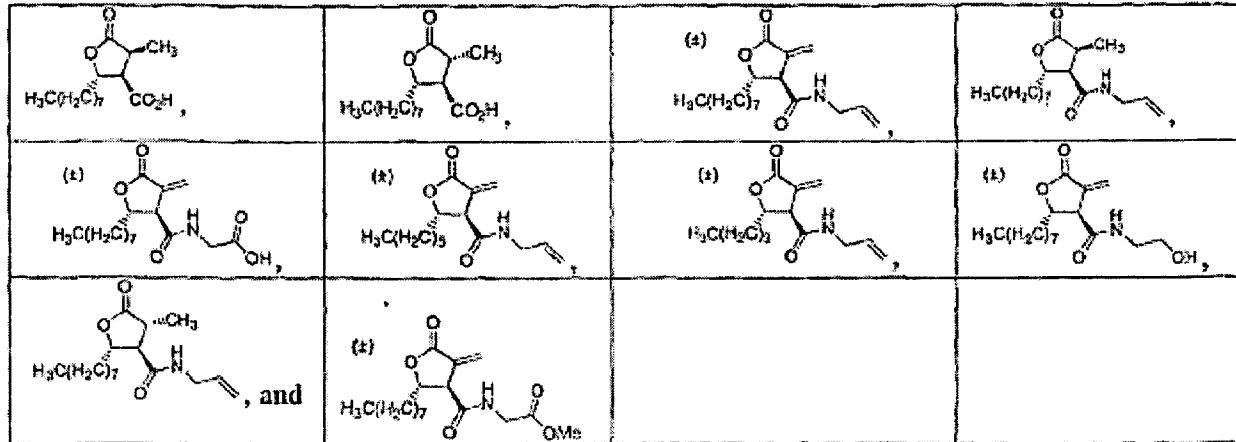
57. (Withdrawn) The method of claim 55, wherein the subject is an animal.

58. (Withdrawn) A method of inhibiting fatty acid synthase activity in an animal or human subject comprising administering an effective amount of a pharmaceutical composition according to claim 23 to said subject.

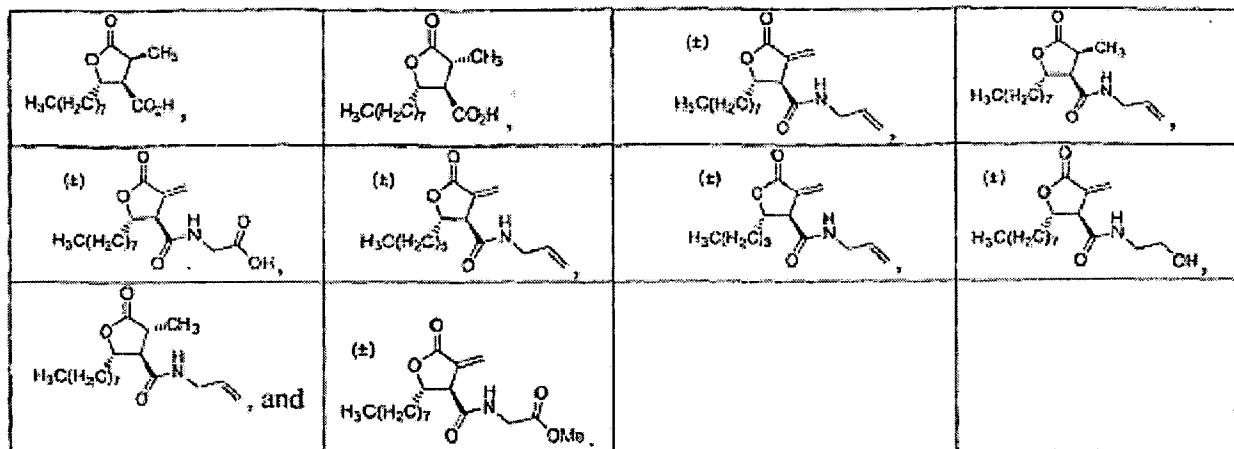
59. (Withdrawn) The method of claim 58, wherein the subject is a human.

60. (Withdrawn) The method of claim 58, wherein the subject is an animal.

61. (Withdrawn) The method of claim 59, wherein the compound is selected from the group consisting of:



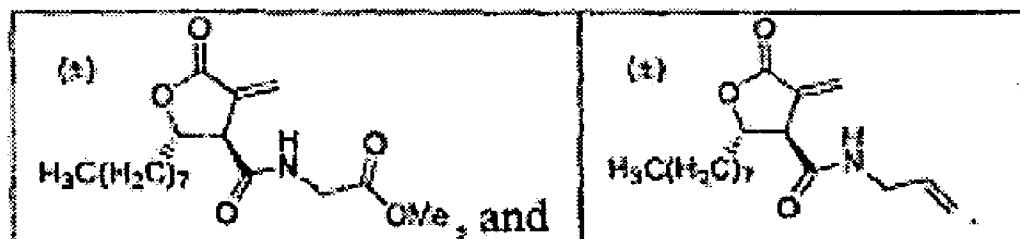
62. (Withdrawn) The method of claim 60, wherein the compound is selected from the group consisting of:



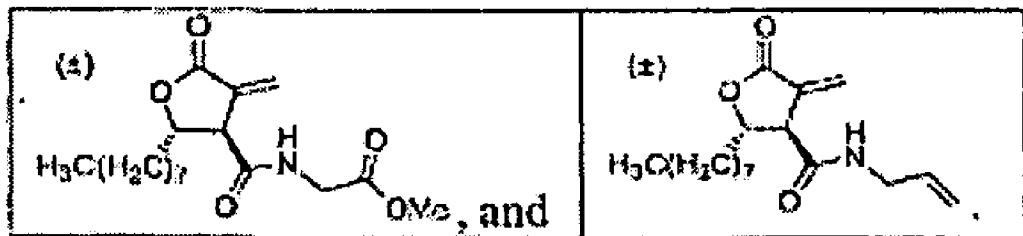
63. (Withdrawn) A method of inhibiting growth of invasive microbial cells in an animal or human subject comprising the administration of an effective amount of a pharmaceutical composition according to claim 23 to said subject.

64 - 65. (Cancelled)

66. (Withdrawn) The method of claim 64, wherein the compound is selected from the group consisting of:



67. (Withdrawn) The method of claim 65, wherein the compound is selected from the group consisting of:



68. (Not Entered)

69. (Currently Amended) Compounds according to claim 15, wherein

$R^{21}$  = cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl,  $=CHR^{23}$ ,  $-C(O)OR^{23}$ ,  $-C(O)R^{23}$ ,

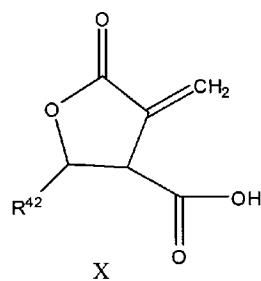
$-CH_2C(O)OR^{23}$ ,  $-CH_2C(O)NHR^{23}$ , where  $R^{23}$  is H or  $C_1-C_{10}$  alkyl, cycloalkyl, or alkenyl, except when  $R^{21}$  is  $=CHR^{23}$ ,  $R^{23}$  is not H ;

$R^{22}$  =  $C_1-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl;

with the proviso that when  $R^{21}$  is  $-COOH$ , then  $R^{22}$  is not  $\underline{-CH_3}$ ,  $\underline{-C_{13}H_{27}}$  or  $\underline{C_{13}H_{27}}$  and with the further proviso that when  $R^{21}$  is  $-CH_2COOH$ , then  $R^{22}$  is not  $-CH_2CH_3$ , or  $-iC_5H_{11}$ .

70. (Previously Presented) A pharmaceutical composition comprising a pharmaceutical diluent and a compound according to claim 69.

71. (Previously Presented) Compounds of formula X:

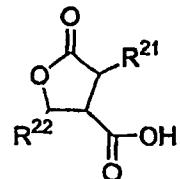


wherein

$R^{42} = C_2-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl.

72. (Previously Presented) A pharmaceutical composition comprising a pharmaceutical diluent and a compound according to claim 71.

73. (New) A method of inhibiting the activity of fatty acid synthase in a cell comprising administering to the cell an effective amount of a pharmaceutical composition comprising a pharmaceutical diluent and one or more compounds of formula V:



**V**

wherein

$R^{21} = C_2-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl,  $=CHR^{23}$ ,  $-C(O)OR^{23}$

$-C(O)R^{23}$ ,  $-CH_2C(O)OR^{23}$ ,  $-CH_2C(O)NHR^{23}$ , where  $R^{23}$  is H or  $C_1-C_{10}$  alkyl, cycloalkyl, or alkenyl; and

$R^{22} = C_2-C_{20}$  alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl.